

Appl. No. 08/904,121
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REMARKS

In his Office Action dated April 29, 2003, the Examiner rejected claims 1-13, 15-18, and 21-22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,409,695, to Johnston in view of U.S. Patent No. 5,317,769 to Weismiller et al.. The Examiner also rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,409,695, to Johnston in view of U.S. Patent No. 5,317,769 to Weismiller et al., and further in view of U.S. Patent No. 5,393,938 to Bumbalough. The Examiner also rejected claims 19-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,409,695, to Johnston in view of U.S. Patent No. 5,317,769 to Weismiller et al., and further in view of U.S. Patent No. 5,295,276 to Richards.

Although Applicant will traverse each rejection on the merits of the rejection of claim 1, Applicant now states that it does not in any manner admit that either Weismiller et al., Bumbalough, or Richards is prior art to the invention of the present application and does not waive any right to later present evidence establishing prior invention. In any case, for the following reasons, Applicant respectfully traverses each of the rejections.

Johnston is directed toward an adjustable bed specifically adapted for the care of morbidly obese patients, i.e., patients weighing between 300 and 700 pounds. The bed of Johnston is provided with an adjustable mattress support, including a leg section, a seat section, a head section, and a mechanism for articulation of the head and leg sections with respect to the seat section. Importantly, Johnston discloses that one of the principal objects of the invention is to provide a bed having "great structural rigidity and strength to accommodate patients weighing between 300 and 700 pounds." Col. 1, lines 30-33. To this end, Johnston teaches that the *center section 5* of the mattress support should be rigidly positioned above the frame of the bed by

spaced pedestals 44, 45 reinforced by a number of gussets 47. Col. 3, line 67 to col. 4, line 9.¹ Lift means 50 and controls 57, 58 are provided to tilt the head and foot sections 4 and 6 *with respect to the center section 5*. Col. 4, lines 9-12, 42-44. The center section 5, however, does not move.

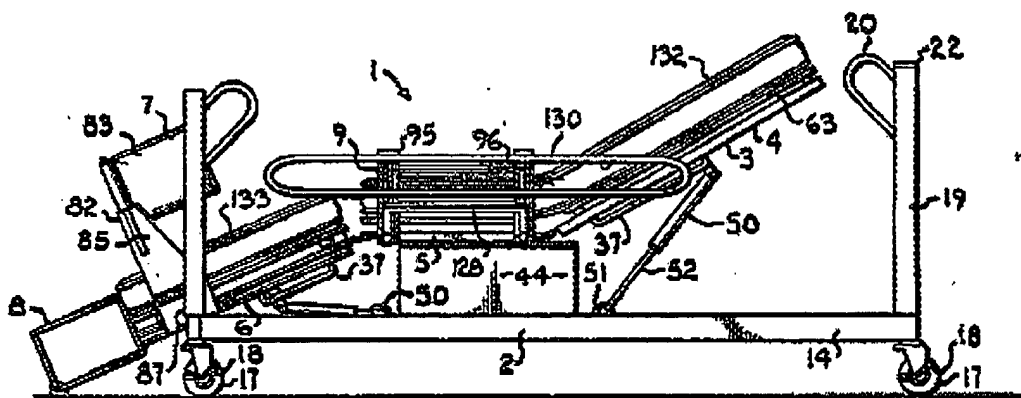


Fig. 3.

FIG. 3 of the Johnston patent, showing center section 5 on pedastal 44.

The limited adjustability of the Johnston bariatric bed appears to reflect the state of the art for handling of bariatric patients as existed prior to Applicant's invention, i.e., that bariatric patients are very difficult to handle and, at that time, could not be freely maneuvered due to the structural requirements necessitated by patient safety concerns.

Weismiller et al., discloses an apparatus for elevating and lowering a patient support frame 12 with respect to a base 14 and also providing Trendelenburg or reverse Trendelenburg

¹ A “gusser” is defined as “A triangular metal bracket used to strengthen a joist.” AMERICAN HERITAGE DICTIONARY. (4th ed. 2000) (see <http://dictionary.reference.com>).

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positioning with respect to the base 14. Weismiller et al. does not disclose a mechanism for articulating the patient support frame 12.

Weismiller's Trendelenburg/reverse Trendelenburg positioning is accomplished through two multi-link mechanical drives 16 and 18 driven by drive screw actuators 20 and 22 disposed on the head and foot ends, respectively, of the bed. Each mechanical drive 16 and 18 comprises a support link 36 or 38 pivotally connected to the base 14, a first arm 66 pivotally connected to the support link 36 or 38 on one end and to a torque shaft 62 at the other end, a second arm 68 rigidly connected to the torque shaft 62 and at an angle of about 90° to the first arm 66, and a drive link 40, 42 pivotally connected one end to the second arm 66 and on the other end to drive screw 70 or 72 of the actuator 20 or 22.

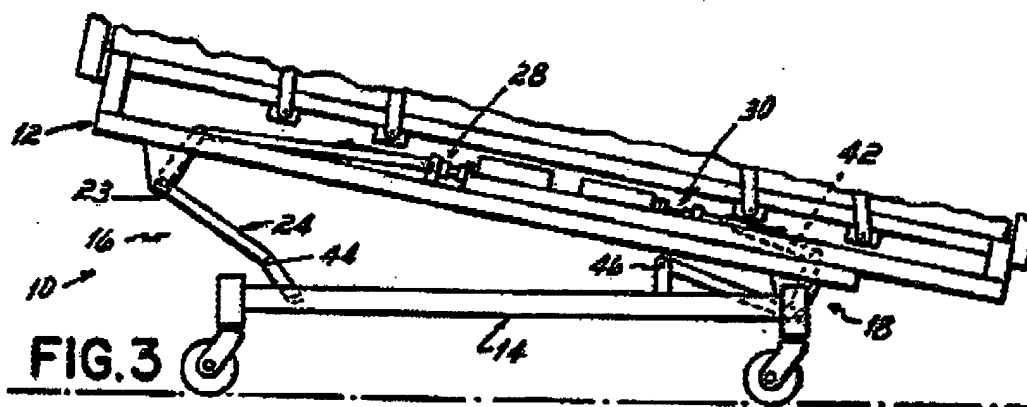


FIG. 3 of the Weismiller et al. patent

The Examiner argues that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bed disclosed by Johnston to have a raise-and-lower mechanism, as taught by Weismiller, to set the bed at various heights as required for activity or therapy."

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There is no teaching, motivation, or suggestion to combine Johnston with Weismiller, and that would also suggest a reasonable expectation of success.

When an obviousness determination is based on multiple prior art references, there must be a showing of some 'teaching, suggestion, or reason' to combine the references. *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1348 (Fed. Cir. 2000). Moreover, the prior art must also "suggest a reasonable likelihood of success" that the proposed combination or modification can carry out the claimed invention. See *Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356 (Fed. Cir. 1999); *In re Rinehart*, 531 F.2d 1048, 1054 (C.C.P.A. 1976) (requiring "reasonable expectation of success" for combination to render claimed invention obvious); *Ex Parte Hudson*, 18 U.S.P.Q.2d 1322 (Board Pat. App. & Int. 1990) ("[T]he critical inquiry is would there have been a reasonable expectation of success in achieving the desired goal, applying only the knowledge evidenced as being part of the prior art."). If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See MPEP § 2143.01 ("The Proposed Modification Cannot Render the Prior Art Unsatisfactory for its Intended Purpose").

The Examiner identified no teaching, suggestion, or motivation for modifying Johnston to include the lift and longitudinal tilt mechanism of Weismiller. On the contrary, the following passage from Johnston *teaches away* from a combination with Weismiller:

The principal objects of the present invention are: to provide an adjustable bed specifically adapted for use by morbidly obese patients; to provide such a bed of great structural rigidity and strength to accommodate patients weighing between 300 and 700 pounds

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Col. 1, lines 29-33. Johnston discloses a minimum of linkages for the foot and head section lift mechanisms of its bed. Moreover, these mechanisms are used simply to articulate the foot and head section, not lift the entire patient support platform.

No reasonable observer would characterize Weismiller's lift and longitudinal tilt mechanism as providing the "structural rigidity and strength" desired by Johnston. Use of the Weismiller lift mechanism to lift the entire patient support platform of a bariatric bed would impose an enormous amount of torque and stress on the many links and hinges of Weismiller's lift and tilt mechanism. In short, it seems quite unlikely that any person of ordinary skill in the art would regard Weismiller's lift mechanism as a suitable modification to the Johnston bed.

Furthermore, there is no apparent, trivial, or obvious combination of Johnston and Weismiller that would cover the claimed invention. Johnston discloses separate lift mechanisms 50 in order to articulate the foot and head sections of a bariatric support platform in relation to the center section and base frame of the bed. Weismiller discloses lift mechanisms 16 and 18 at about the same position, relative to the patient support platform, as Johnston's lift mechanisms 50. If one mere substituted Weismiller's lift mechanisms 16 and 18 for Johnston's lift mechanisms 50, Johnston would be no more capable than it was before. It would still not be capable of Trendelenburg or reverse Trendelenburg positioning. Nor would it be adapted to raise or lower the entire patient support platform relative to the frame.


If, in the alternative, one substituted Weismiller's rigid patient support platform for Johnston's articulating patient support platform – and decoupled it from the pedestals 44 and 45 – then the bed might be adapted to raise and lower a patient support platform for a person of normal weight relative to the frame, or to perform Trendelenburg or reverse Trendelenburg positioning. But it would no longer articulate.

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Therefore, even if Weismiller's lift mechanism were rigid and sturdy enough for bariatric applications, neither of the two aforementioned modifications could possibly cover the claimed invention. If there is a practical way to combine Weismiller with Johnston to achieve the claimed invention, it is entirely non-obvious to the undersigned. The Applicant respectfully submits that there is no "reasonable expectation of success" that the proposed combination would render the claimed invention obvious. On the contrary, it is clear that the proposed modification would render Johnston unsatisfactory for its intended purpose.

In view of the foregoing arguments, Applicant respectfully asks that the Examiner withdraw the § 103 rejections. Believing that all matters raised in the Examiner's April 29, 2003, Office Action, have been addressed, Applicant respectfully asks that the claims be allowed and passed to issue.

Respectfully submitted,


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